

SEQUENCE LISTING

<110> DOI, Hirofumi
HOSOGI, Shinya
WADA, Naoya

<120> MKK7 Activation Inhibitor

<130> 3190-069

<140> 10/519,465

<141> 2004-12-27

<150> PCT/JP2003/008179

<151> 2003-06-27

<150> JP P 2002-190909

<151> 2002-06-28

<150> JP P 2002-190910

<151> 2002-06-28

<160> 46

<170> PatentIn version 3.1

<210> 1

<211> 7

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:3) of PAK4

<400> 1

Asp Val Trp Ser Leu Gly Ile
1 5

<210> 2

<211> 6

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:4) of PAK4

<400> 2

Pro Pro Ala Arg Pro Arg
1 5

<210> 3
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Partial sequence of PAK4, which is highly homologous to that (SEQ
ID NO:1) of MKK7

<400> 3

Asp Ile Trp Ser Leu Gly Ile
1 5

<210> 4
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Partial sequence of PAK4, which is highly homologous to that (SEQ
ID NO:2) of MKK7

<400> 4

Pro Pro Ala Arg Ala Arg
1 5

<210> 5
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, which is highly homologous to that (SEQ
ID NO:7) of JIK

<400> 5

Trp Ser Leu Gly Ile Ser
1 5

<210> 6
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, which is highly homologous to that (SEQ
ID NO:8) of JIK

<400> 6

Leu Glu Ala Lys Leu Lys
1 5

<210> 7
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of JIK, which is highly homologous to that (SEQ
ID NO:5) of MKK7

<400> 7

Trp Ser Leu Gly Ile Thr
1 5

<210> 8
<211> 6
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of JIK, which is highly homologous to that (SEQ
ID NO:6) of MKK7

<400> 8

Leu Glu Asn Lys Leu Lys
1 5

<210> 9
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 9

Tyr Asp Ile Arg Ala Asp Val Trp Ser Leu Gly Ile Ser Leu Val Glu
1 5 10 15

Leu Ala Thr Gly Gln Phe Pro Tyr
20

<210> 10

<211> 24

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 10

Tyr Gly Pro Glu Val Asp Ile Trp Ser Leu Gly Ile Met Val Ile Glu
1 5 10 15

Met Val Asp Gly Glu Pro Pro Tyr
20

<210> 11

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence identical in the sequences of MKK7, PAK4 and JIK

<400> 11

Trp Ser Leu Gly Ile
1 5

<210> 12

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 12

Leu Glu Asn Leu Gly Glu Met Gly Ser Gly Thr Cys Gly Gln Val Trp
1 5 10 15

Lys Met Arg Phe Arg Lys Thr Gly His Val Ile Ala Val Lys Gln Met
20 25 30

<210> 13

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 13

Leu Asp Asn Phe Ile Lys Ile Gly Glu Gly Ser Thr Gly Ile Val Cys
1 5 10 15

Ile Ala Thr Val Arg Ser Ser Gly Lys Leu Val Ala Val Lys Lys Met
20 25 30

<210> 14

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 14

Pro Thr Pro Pro Ala Arg Pro Arg His Met Leu Gly Leu Pro
1 5 10

<210> 15

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 15

Pro Pro Pro Pro Ala Arg Ala Arg Gln Glu Asn Gly Met Pro
1 5 10

<210> 16

<211> 4

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence identical in the sequences of MKK7 and PAK4

<400> 16

Pro Pro Ala Arg
1

<210> 17

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 17

Leu Thr Lys Asp His Arg Lys Arg Pro Lys Tyr Asn Lys Leu Leu Glu
1 5 10 15

His Ser Phe Ile Lys Arg
20

<210> 18

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 18

Leu Val Arg Asp Pro Ala Gln Arg Ala Thr Ala Ala Glu Leu Leu Lys
1 5 10 15
His Pro Phe Leu Ala Lys
20

<210> 19

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 19

Val Val Leu Lys Ser His Asp Cys Pro Tyr Ile Val Gln Cys Phe Gly
1 5 10 15

Thr Phe Ile Thr Asn Thr Asp Val Phe Ile Ala Met Glu Leu Met
20 25 30

<210> 20

<211> 31

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 20

Val Ile Met Arg Asp Tyr Gln His Glu Asn Val Val Glu Met Tyr Asn
1 5 10 15

Ser Tyr Leu Val Gly Asp Glu Leu Trp Val Val Met Glu Phe Leu
20 25 30

<210> 21

<211> 33

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and PAK4

<400> 21

Asp Ile Ser Pro Gln Arg Pro Arg Pro Thr Leu Gln Leu Pro Leu Ala
1 5 10 15

Asn Asp Gly Gly Ser Arg Ser Pro Ser Ser Glu Ser Ser Pro Gln His
20 25 30

Pro

<210> 22

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of PAK4, showing high score in the local alignment between MKK7 and PAK4

<400> 22

Asp Val Ala Pro Asn Gly Pro Ser Ala Gly Gly Leu Ala Ile Pro Gln
1 5 10 15

Ser Ser Ser Ser Ser Ser Arg Pro Pro Thr Arg Ala Arg Gly Ala Pro
20 25 30

Ser Pro

<210> 23

<211> 15

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and PAK4

<400> 23

Ser Glu Ser Ser Pro Gln His Pro Thr Pro Pro Ala Arg Pro Arg

1 5 10 15

<210> 24
<211> 15
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 24

Pro Gln Ser Ser Ser Ser Ser Ser Arg Pro Pro Thr Arg Ala Arg
1 5 10 15

<210> 25
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 25

Gly Gly Ser Arg Ser Pro Ser Ser Glu Ser Ser Pro Gln His Pro Thr
1 5 10 15

Pro Pro Ala Arg
20

<210> 26
<211> 20
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 26

Gly Gly Leu Ala Ile Pro Gln Ser Ser Ser Ser Ser Ser Arg Pro Pro
1 5 10 15

Thr Arg Ala Arg
20

<210> 27
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and PAK4

<400> 27

Ile Ser Pro Gln Arg Pro Arg Pro Thr Leu Gln Leu Pro Leu Ala Asn
1 5 10 15

Asp Gly Gly Ser Arg Ser
20

<210> 28
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of PAK4, showing high score in the local alignment
between MKK7 and PAK4

<400> 28

Val Ser His Glu Gln Phe Arg Ala Ala Leu Gln Leu Val Val Asp Pro
1 5 10 15

Gly Asp Pro Arg Ser
20

<210> 29
<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 29

Tyr Asp Ile Arg Ala Asp Val Trp Ser Leu Gly Ile Ser Leu Val Glu
1 5 10 15
Leu Ala

<210> 30

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 30

Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly Ile Thr Cys Ile Glu
1 5 10 15

Leu Ala

<210> 31

<211> 35

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 31

Leu Gly Glu Met Gly Ser Gly Thr Cys Gly Gln Val Trp Lys Met Arg
1 5 10 15

Phe Arg Lys Thr Gly His Val Ile Ala Val Lys Gln Met Arg Arg Ser
20 25 30

Gly Asn Lys
35

<210> 32

<211> 35

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 32

Leu	His	Glu	Ile	Gly	His	Gly	Ser	Phe	Gly	Ala	Val	Tyr	Phe	Ala	Thr
1				5					10					15	

Asn	Ala	His	Thr	Ser	Glu	Val	Val	Ala	Ile	Lys	Lys	Met	Ser	Tyr	Ser
			20					25					30		

Gly	Lys	Gln
		35

<210> 33

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 33

Glu	Gln	Lys	Leu	Ser	Arg	Leu	Glu	Ala	Lys	Leu	Lys	Gln	Glu	Asn	Arg
1				5					10				15		

Glu	Ala	Arg	Arg	Arg	Ile
			20		

<210> 34

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 34

Gln Lys Gln Leu Ile Ala Leu Glu Asn Lys Leu Lys Ala Glu Met Asp
1 5 10 15
Glu His Arg Leu Lys Leu
20

<210> 35

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 35

Glu Ile Asp Gln Lys Leu Gln Glu Ile Met Lys Gln Thr Gly Tyr Leu
1 5 10 15

<210> 36

<211> 16

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 36

Gln Thr His Glu Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu
1 5 10 15

<210> 37

<211> 19

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 37

Gln Thr Gly Tyr Leu Thr Ile Gly Gly Gln Arg Tyr Gln Ala Glu Ile

1 5 10 15

Asn Asp Leu

<210> 38
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 38

Gln Thr Arg Lys Leu Ala Ile Leu Ala Glu Gln Tyr Glu Gln Ser Ile
1 5 10 15

Asn Glu Met

<210> 39
<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of MKK7, showing high score in the local alignment
between MKK7 and JIK

<400> 39

Leu Glu Gln Lys Leu Ser Arg Leu Glu Ala Lys Leu Lys Gln Glu Asn
1 5 10 15

Arg Glu

<210> 40
<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<223> Partial sequence of JIK, showing high score in the local alignment
between MKK7 and JIK

<400> 40

Leu Glu Gln Arg Val Ser Leu Arg Arg Ala His Leu Glu Gln Lys Ile
 1 5 10 15

Glu Glu

<210> 41

<211> 13

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
 between MKK7 and JIK

<400> 41

Gln Arg Tyr Gln Ala Glu Ile Asn Asp Leu Glu Asn Leu
 1 5 10

<210> 42

<211> 13

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of JIK, showing high score in the local alignment
 between MKK7 and JIK

<400> 42

Gln Arg Thr Lys Asp Ala Val Arg Glu Leu Asp Asn Leu
 1 5 10

<210> 43

<211> 10

<212> PRT

<213> Homo sapiens

<220>

<221> misc_feature

<223> Partial sequence of MKK7, showing high score in the local alignment
 between MKK7 and JIK

<400> 43

Thr Cys Ala Glu Lys Leu Lys Lys Arg Met
 1 5 10

<210> 44
 <211> 10
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Partial sequence of JIK, showing high score in the local alignment
 between MKK7 and JIK

<400> 44

Ile	Cys	Lys	Glu	Lys	Ile	Lys	Glu	Glu	Met
1				5					10

<210> 45
 <211> 17
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Partial sequence of MKK7, showing high score in the local alignment
 between MKK7 and JIK

<400> 45

Lys	His	Gly	Val	Ile	His	Arg	Asp	Val	Lys	Pro	Ser	Asn	Ile	Leu	Leu
1				5					10					15	

Asp

<210> 46
 <211> 16
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Partial sequence of JIK, showing high score in the local alignment
 between MKK7 and JIK

<400> 46

Arg	His	Asp	Phe	Val	Arg	Arg	Asp	Arg	Pro	Leu	Arg	Val	Leu	Ile	Asp
1				5					10					15	